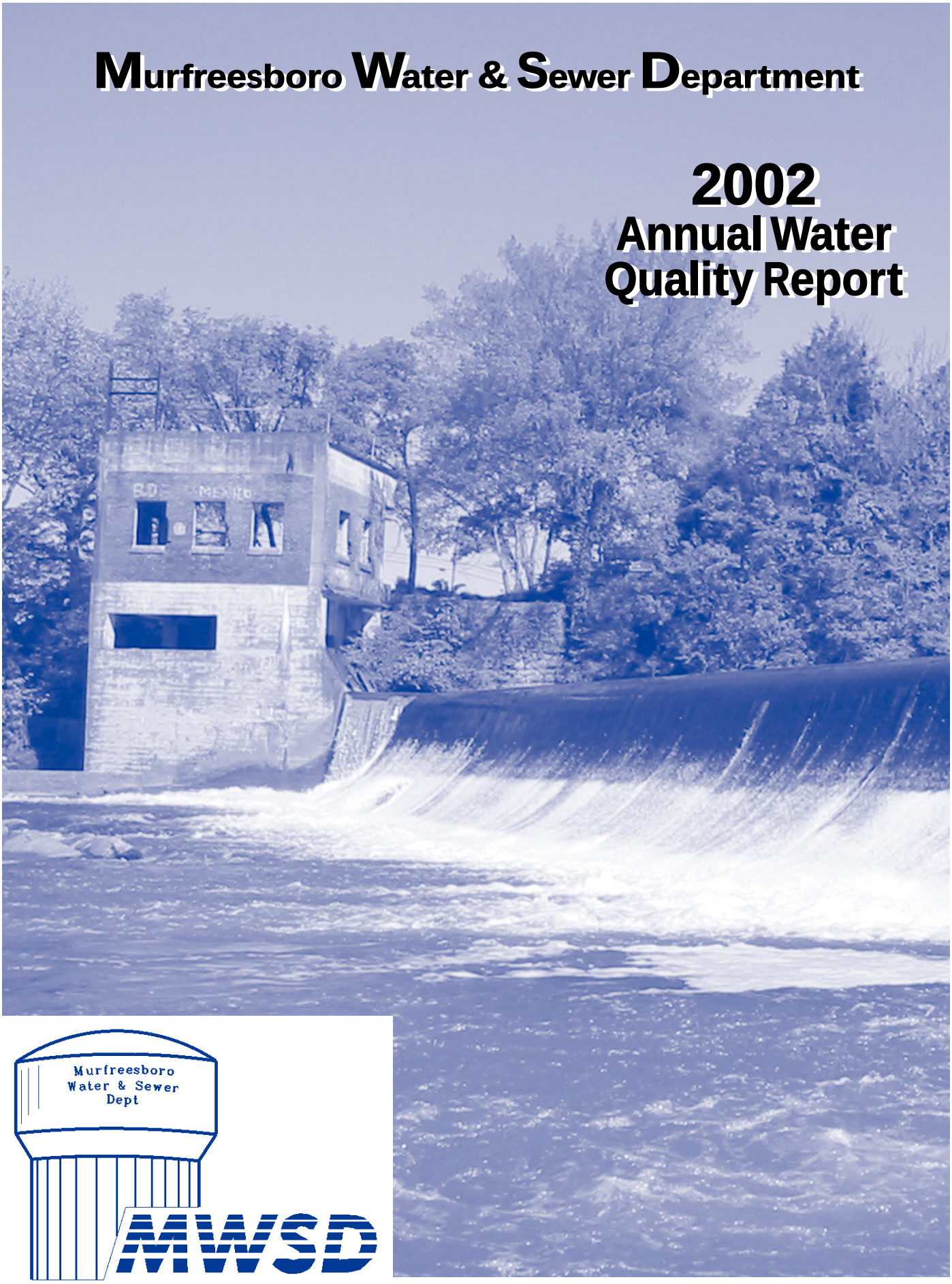
Murfreesboro Water & Sewer Department

2002 Annual Water Quality Report



Murfreesboro Water & Sewer Dept

MWSD

Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

Currently, the Murfreesboro Water and Sewer Department provides water and/or sanitary sewer service to over 24,000 customers through more than 700 miles of water and sewer lines. Our water treatment plant is located behind the Alvin York Veteran's Administration Hospital, at 5528 Sam Jared Road. The plant operates continuously, and daily produces up to 13,000,000 gallons of potable water, all of which meets or surpasses all State and Federal drinking water regulations. Our primary water source is the East Fork of the Stones River, and our alternative source is the J. Percy Priest Lake, both of which are classified as surface water supplies. We are also interconnected to the Smyrna, TN and Consolidated Utility District potable water systems in case of an emergency. Both of these systems receive their raw water from J. Percy Priest Lake. Our wastewater treatment plant is located on the West Fork of the Stones River.

The Murfreesboro Water & Sewer Department is owned and operated by the City of Murfreesboro. We receive no tax revenue from City, State or Federal governments, but rely solely upon our rates and fees for operational funding. MWSD reads every water meter and bills each customer every month. In the event of an abnormally high meter reading, we will attempt to alert the customer. Payment may be made at our drive-up window, payment counter, by mail, or by bank draft.

We want to keep you informed about the water and services we have delivered to you over the past year, and we are pleased to provide you with this year's annual Drinking Water Quality Report. The Murfreesboro Water Department routinely monitors constituents in your drinking water in accordance with Federal and State laws. The test results table in this report shows the substances that were detected for the period of January 1st to December 31st, 2002. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. In fact, your tap water is scrutinized and regulated much more closely than any bottled water. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

terms & abbreviations

Action Level (AL) — the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

Parts per million (ppm) or Milligrams per liter (mg/L) — one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter — one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) — one part per trillion corresponds to one minute in 2,000,000 years or a single penny in $10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) — one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

Picocuries per liter (pCi/L) — picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU) — nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Treatment Technique (TT) — A treatment technique is a required process intended to reduce the level of contaminant in drinking water.

Maximum Contaminant level — The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal — The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

EPA/CDC — The Environmental Protection Agency and the Centers for Disease Control are federal agencies which monitor and regulate water quality.

MRDLG — Maximum residual disinfectant level goal.

MRDL — Maximum residual disinfectant level.

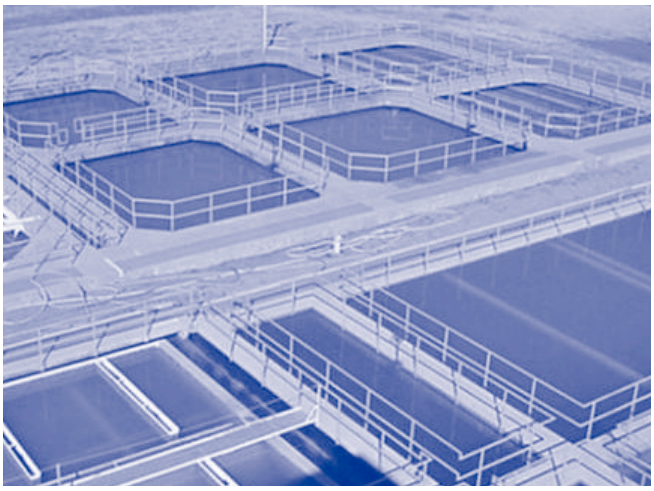
Contaminant	MCLG	MCL	Level Found	Range of Detection	Violation Yes/No	Date of Sample	Typical Source of Contaminant
Total Coliform Bacteria	0	Presence of coliform bacteria in greater than 5% of monthly samples	0	0	NO	2002	Naturally present in the environment.
Fecal coliform & E. coli	0	A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	0	0	NO	2002	Human and animal fecal waste
Turbidity	TT	TT	0.21	0.04 to 0.21 NTU	NO	2002	Soil runoff
Chlorine	MRDLG 4.0 PPM	MRDL 4.0 PPM	3.5 PPM	0.9 to 3.5 PPM	NO	2002	Water additive used to control microbes
Finished Water, Total Organic Carbon	TT	TT	N/A	0.84 to 2.39 PPM	NO	2002	Naturally present in the environment
Inorganic Contaminants							
Barium	2.0 PPM	2.0 PPM	0.012 PM	0.012 PPM	NO	05/17/02	Discharge of drilling wastes: Discharge metal refineries; Erosion of natural deposits
Copper 0 of 30 samples taken. No sites exceeded AL	1.3 PPM	AL = 1.3 PPM	0.27 PPM	0.066 to 0.41 PPM	NO	2002	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride	4.0 PPM	4.0 PPM	1.18 PPM	0.80 to 1.18 PPM	NO	2002	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer & aluminum factories.
Lead 0 of 30 samples taken. No sites exceeded AL	0 PPB	AL = 15 PPB	1.4 PPB	1.0 to 12.0 PPB	NO	2002	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate (as Nitrogen)	10 PPM	10 PPM	1.1 PPM	1.1 PPM	NO	01/30/02	Runoff from fertilizer use; Leaching from septic tanks, sewage: Erosion of natural deposits
Alpha Emitters							
Gross Alpha	0 pCi/L	15 pCi/L	1.4 pCi/L	1.4 pCi/L	NO	03/05/02	Erosion of natural deposits
Volatile Organic Contaminants							
Sodium	N/A	N/A	3.0 PPM	3.0 PPM	NO	05/17/02	N/A
TTHMs Total trihalomethanes	0 PPB	80 PPB	43.4 PPB	16.0 to 112.9 PPB	NO	2001/2002	By-product of drinking water chlorination
Haloacetic acids	0 PPB	60 PPB	36.5 PPB	19.3 to 77.3 PPB	NO	2001/2002	By-product of drinking water chlorination

test RESULTS

As you can see by the above table, **our water system had no violations**. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected.The EPA has determined that **your water is safe** at these levels.

Listed to the left you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the definitions.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lesson the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).



Our water is safe, and we want to keep it that way.

Consequently, we urge our customers to be on guard against cross-connections that might contaminate our water supply. A cross-connection is a link between an approved drinking water supply and any system other than an approved drinking water supply. Our City ordinance provides safeguards against cross-connections in industrial and commercial settings, and MWSD has two full time employees whose sole function is to guard against these types of cross-connections. The risk from residential cross-connections is less than that from industrial and commercial applications, but is very real. The most common form of a residential cross-connection occurs when a garden hose is submerged in a bucket, pool, or standing water. The most dangerous residential cross-connections are those involving chemical applicators for pesticides. A hose bib vacuum breaker provides adequate protection against garden hose cross-connections. This is a simple device which is available at most hardware and plumbing supply stores, generally costs between five and fifteen dollars—a small investment that provides an enormous potential benefit.

Although we anticipate being able to meet all of our customers needs, we urge you to conserve water by promptly repairing leaks within your plumbing system. This not only helps us to keep down production costs, it provides savings on your monthly billings. Even as we encourage conservation, we realize the seasonal need to replenish pools and to water landscaped areas. Realizing this, when your bill is printed in April, May, June, July, August, September and October, if your usage exceeds your winter month average plus twenty percent, your bill is automatically reduced by our Summer Sewer Adjustment to the sewer billing.

If you have any questions about this report or concerning your water quality, please contact Gene Casto at (615) 890-0862 between 7:00 a.m. and 3:00 p.m. Monday through Friday. General information and services are available from our administrative offices at 890-0862 from 8:00 a.m. to 4:30 p.m. Monday through Friday. Our emergency after-hours phone number is 893-1223.

We want our customers to be informed about their water utility. Our regularly scheduled Water & Sewer Board meetings are held on the first Tuesday of each month at 3:30 p.m., at 1725 South Church Street, Murfreesboro.

We at Murfreesboro Water & Sewer Department work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.